

In the Claims:

Please rewrite claims 3 and 8 as follows. Marked up versions of these claims are attached hereto.

A1
3. (amended) A method according to claim 2, wherein said switch is a multistage switch, said method further comprising:

- d) buffering the request at each stage of the switch;
- e) discarding low priority requests when the buffer reaches a threshold.

A2
8. (amended) A method according to claim 7, wherein said switch is a multistage switch, said method further comprising:

- e) buffering the request at each stage of the switch;
- f) discarding low priority requests when the buffer reaches a threshold.

REMARKS

The drawings are objected to because in Figure 3, "7,560 bytes/row" should be "7,650 bytes/row". A proposed drawing correction is attached hereto.

The specification is objected to for failing to provide proper antecedent basis for the claimed subject matter. According to the Examiner, "52 bytes" in claims 5 and 6 is not described in the specification. The Applicant respectfully disagrees.

Claim 5 specifies that each request for space is for a 52 byte chunk of space. Claim 6 specifies that variable length packets are segmented into 52 byte chunks. This is specified in the specification in several places. See, e.g., page 8, lines 1-9 which states:

"A maximum of ninety-six PDUs per row is permitted. The sixteen four-bit tags of a PDU are not needed for PDU routing so they are used as parity bits to protect the ATM or variable length packet payload. Of the sixty-four-byte payload, twelve bytes (96 bits) are used by the switch for internal routing. This leaves fifty-two bytes for actual payload which is sufficient to carry an ATM cell (without the one-byte HEC) and sufficient for larger packets after fragmentation."

Claims 1-12 are pending in the application. Claim 1 is the only independent claim.

Claims 1-12 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject which applicant regards as the invention. Regarding claim 1, the Examiner notes that the claim is vague because "N" is not defined. The Applicant respectfully disagrees. Part "a)" of claim 1 specifies that the data frame has a plurality of rows. Part "b)" of claim 1 specifies that a request is made during row N for space in row N+1. Thus, it is clear that N represents one of the plurality of rows and that, more significantly, N represents the row which occurs prior to row N+1. The terminology N, N+1, etc. is commonly

used in many technical areas to represent a series. It is submitted that claim 1 is clear as written and does not need to be amended.

With regard to claims 3 and 8, the Examiner states that the language "at which stage in the switch" is confusing because it is unclear if the switch includes multiple stages. Although the Applicant disagrees with the Examiner, the preambles of claims 3 and 8 have been amended to clarify that the switch is indeed a multistage switch.

Claims 1, 2, and 20-22 stand rejected under the judicially created doctrine of obviousness-type double patenting as compared to claims 1, 4-6, and 8-9 of co-pending application serial number 09/717,999 (TRA-ONEX-001).

A terminal disclaimer is enclosed herewith, thus overcoming the double patenting rejection.

Claims 1, 5, 6, 11, and 12 stand rejected under 35 U.S.C. §103(a) as obvious over Little in view of Parrella et al. and Chow et al. According to the Examiner, Little discloses generating a repeating data frame having a plurality of rows but does not disclose any request and grant scheme. The Examiner further opines that Parrella et al. disclose a request and grant scheme where the request is made in one "row/frame" for space in the next

"row/frame". Further, the Examiner states that Chow et al. discloses "the use of in-band and out-of-band links for transmission of messages". The Examiner concludes that it would have been obvious to combine Little, Parrella et al. and Chow "so as to use and assign bandwidth effectively to users."

The Examiner's rejection fails for three reasons: first, the references do not teach or suggest every element of the rejected claims; second, the Examiner's stated incentive to combine the references is a generalization of the advantages of the claimed invention and is not a suggestion to make any combination of features from the cited references; and third, the references are directed to such diverse arts that their combination would not have been contemplated.

The Examiner's statement of the teachings of Parrella et al. openly confuses rows and frames. In Parrella et al. a request is made in the first row of a frame for the entire data portion of the next following frame. Access is granted in the last row of the frame in which the request is made. Parrella et al. does not teach or suggest the claimed step of making requests during row N for space in row N+1 of the same frame. Moreover, Parrella et al. is co-owned by the assignee of the instant application and issued after the filing of the instant application.

The Examiner's statement that Chow et al. teaches "the use of in-band and out-of-band links for transmission of messages" is hardly a teaching or suggestion to make an out-of-band grant in response to an in-band request for bandwidth. Moreover, Chow et al. teaches that out-of-band messaging is not preferred. See, col. 26, lines 43-44.

The Examiner states that the incentive to combine the references is "so as to use and assign bandwidth effectively to users." This is not an incentive to make any combination, it is a desirable result. Incentive to combine must be some teaching in the art that a combination is desirable. The Examiner's statement of incentive does not suggest any combination. It merely states a desirable result.

"The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, 202 U.S.P.Q. 500 (C.C.P.A. 1979). See, also, ACS Hospital Sys., Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929 (Fed. Cir. 1984).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section

103, teachings of references can be combined only if there is some suggestion or incentive to do so."

Without providing evidence of incentive to combine, the combination of references is based on hindsight. To draw on hindsight knowledge of the applicant's Specification, when the prior art does not contain or suggest the knowledge, is to use the invention as a template for its own reconstruction--an illogical and inappropriate process in which to determine patentability. In In re Dembiczak, 50 USPQ2d 1614, (Fed. Cir. 1999), the Federal Circuit noted that

"[m]easuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Id. at 1617

Little, Parrella et al. and Chow et al. each concern very different inventions. Little concerns a method for providing low cost broadband service to a consumer. Parrella et al. concerns a method for limiting data bursts in an ATM switch utilizing a shared bus. Chow et al. concerns a parallel processing system. Of these three references, only Parrella et al. concerns the workings of a telecommunications switch. Little merely mentions the use of telecommunications switches. Chow et al. has nothing to do with telecommunications switches. Thus, it is difficult to imagine why someone looking for a method for arbitrating bandwidth

in a communications switch would look to all of these three references.

All of the remarks made above apply to claim 1. Claims 5, 6, 11, and 12 depend, either directly or indirectly, from claim 1. Thus, the remarks made above regarding claim 1 apply to these claims as well. In addition, there is no suggestion in any of the references that bandwidth be apportioned in 52-byte chunks (claims 5 and 6) or that requests for bandwidth be made out-of-band (claim 12).

Claims 2-4 and 7-10 stand rejected under 35 U.S.C. §103(a) as obvious over Little in view of Parrella et al. and Chow et al. and further in view of Lea.

With regard to claims 2 and 7, the Examiner states that Little, Parrella et al. and Chow et al. disclose all that is claimed but for the request including priority level information which is taught by Lea. The Examiner further states that the incentive to combine Lea with the other three references would have been "to grant access to the more important users".

Claims 2 and 7 depend directly and indirectly from claim 1 and the remarks made above regarding claim 1 apply to these claims as well. Further, the cited portion of Lea mentions that requests are granted on the basis of priority. This is not the same as a

request including priority level information. The cited portion of Lea is silent on the issue of how priority is determined and does not suggest that priority level information is included in the request. Thus, as for the Examiner's stated incentive to combine, the assignment of priority and the granting of access to more important users can be accomplished in many ways other than including priority level information in a request for bandwidth.

Regarding claims 3, 4, and 8-10, the Examiner concedes that the cited art does not teach or suggest buffering requests or discarding requests. Nevertheless, the Examiner claims that such is well known in the art.

The Examiner cannot assume that the prior art contains an element when it is not clearly shown in the prior art. See, Ex parte Wolters and Kuypers, 214 U.S.P.Q. 735 (Bd.App. 1979) (Examiner's burden of supporting his holding of unpatentability is not met by "assuming" the presence of a missing component). Pursuant to MPEP §2144.03, the Applicant respectfully requests that the Examiner cite a reference which teaches the features of claims 3, 4, and 8-10.

In light of all of the above, it is submitted that the claims are in order for allowance, and prompt allowance is earnestly requested. Should any issues remain outstanding, the Examiner is

invited to call the undersigned attorney of record so that the case may proceed expeditiously to allowance.

Respectfully submitted,

A handwritten signature in cursive script, reading "David P. Gordon".

David P. Gordon
Reg. #29,996
Attorney for Applicant(s)

65 Woods End Road
Stamford, CT 06905
(203) 329-1160

September 5, 2002

3. (amended) A method according to claim 2, wherein said switch is a multistage switch, said method further comprising:

- d) buffering the request at each stage of the switch;
- e) discarding low priority requests when the buffer reaches a threshold.

8. (amended) A method according to claim 7, wherein said switch is a multistage switch, said method further comprising:

- e) buffering the request at each stage of the switch;
- f) discarding low priority requests when the buffer reaches a threshold.